

**What Is Claimed Is:**

1. A multi-positionable power distribution unit installable in any one  
of multiple positions within a system of one or more electronic devices, the multi-  
5 positionable power distribution unit comprising:

a set of external connectors configured to couple to one or more external  
sources of electrical power for the system; and

a set of internal connectors configured to couple to one or more power  
consumers within the system;

10 wherein the multi-positionable power distribution unit is installable in any  
of multiple operative positions, depending upon a location at which the one or  
more source of electrical power are to be coupled to said set of external  
connectors.

15 2. The multi-positionable power distribution unit of claim 1, further  
comprising:

circuitry coupling said set of external connectors and said set of internal  
connectors.

20 3. The multi-positionable power distribution unit of claim 2, further  
comprising:

a heat sink for dissipating heat generated by said circuitry.

4. The multi-positionable power distribution unit of claim 2, wherein  
25 said circuitry is configured to provide diagnostic information to an external  
diagnostic module.

5. The multi-positionable power distribution unit of claim 2, wherein said circuitry is configured to filter the electrical power.

6. A multi-positionable power distribution unit, comprising:  
5 a first external connector configured for coupling to a first external power source;  
a first internal connector configured to couple to a power consumer when the multi-positionable power distribution unit is placed in a first position; and  
a second internal connector configured to couple to a power consumer  
10 when the multi-positionable power distribution unit is placed in a second position;  
wherein the multi-positionable power distribution unit is placed in one of said first position and said second position to facilitate said coupling of said first external connector to the first external power source.

7. The multi-positionable power distribution unit of claim 6, further comprising:  
15 a second external connector configured for coupling to a second external power source.

8. The multi-positionable power distribution unit of claim 6, further comprising:  
20 a first filter circuit configured to filter electrical power received at said first external connector for the first power consumer.

9. The multi-positionable power distribution unit of claim 8, further comprising:  
25 a second external connector configured for coupling to a second external

power source; and

a second filter circuit configured to filter electrical power received at said second external connector for the first power consumer.

5           10.    The multi-positionable power distribution unit of claim 8, further comprising:

a second external connector configured for coupling to a second external power source; and

10           a second filter circuit configured to filter electrical power received at said second external connector for a second power consumer.

11.    The multi-positionable power distribution unit of claim 6, further comprising:

15           a vent for facilitating airflow.

12.    The multi-positionable power distribution unit of claim 6, further comprising:

a heat sink.

20           13.    The multi-positionable power distribution unit of claim 6, wherein the first power consumer is a power supply.

14.    The multi-positionable power distribution unit of claim 6, wherein the first power consumer is an interface board.

25           15.    The multi-positionable power distribution unit of claim 6, wherein said first internal connector is configured to generate a signal when said first

external connector is coupled to the first external power source.

16. A multi-positionable power distribution unit for installation in any of multiple positions in a system of electronic equipment, comprising:

5 a first connector configured to interface with the system when the multi-positionable power distribution unit is installed in a first position;

a second connector configured to interface with the system when the multi-positionable power distribution unit is installed in a second position;

a set of external power connectors configured to interface with one or  
10 more external power sources when the multi-positionable power distribution unit is installed in either of said first position and said second position; and

filtering means for filtering electrical power received at one or more of said external power connectors.

15 17. The multi-positionable power distribution unit of claim 16, further comprising:

a heat sink configured to dissipate heat.

18. The multi-positionable power distribution unit of claim 16,  
20 wherein said set of external power connectors includes a first power connector for coupling to a first external power source and a second power connector for coupling to a second external power source.

19. The multi-positionable power distribution unit of claim 16,  
25 wherein:

the multi-positionable power distribution unit is installed in said first position if said external power connectors will couple to the one or more external

power sources through a first side of the system; and

the multi-positionable power distribution unit is installed in said second position if said external power connectors will couple to the one or more external power sources through a second side of the system.

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20. An enclosure defining a substantially closed space for operating one or more electronic devices, the enclosure comprising:

an interface board for interconnecting multiple components of the enclosure;

10 one or more power supplies; and

a multi-positionable power distribution unit configured to transfer electrical power from an external power source for said one or more power supplies;

15 wherein said multi-positionable power distribution unit is installable in any of multiple positions.

21. The enclosure of claim 20, wherein said multi-positionable power distribution unit is installed in a first position if the external power source will be accessed through a first portion of the enclosure; and

20 wherein said multi-positionable power distribution unit is installed in a second position if the external power source will be accessed through a second portion of the enclosure.

22. The enclosure of claim 20, wherein said multi-positionable power distribution unit comprises:

an external connector configured to couple to the external power source;

a first connector configured to couple to a power consumer when said

multi-positionable power distribution unit is installed in a first position; and  
a second connector configured to couple to a power consumer when said  
multi-positionable power distribution unit is installed in a second position.

5           23.    The enclosure of claim 22, wherein said power consumer  
comprises said interface board.

          24.    The enclosure of claim 22, wherein said power consumer  
comprises a first power supply.

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          25.    The enclosure of claim 22, wherein said multi-positionable power  
distribution unit further comprises:  
filter circuitry for filtering power received from the external power source.

15           26.    The enclosure of claim 22, wherein said multi-positionable power  
distribution unit further comprises:  
a heat sink.

          27.    A method of installing a multi-positionable power distribution unit  
20 to provide electrical power to a system of electronic devices, comprising:  
identifying one of multiple access points of the system for an external  
power source;

          installing the multi-positionable power distribution unit within the system  
so as to place an external connector of the multi-positionable power distribution  
25 unit in proximity to the identified access point;

          if the multi-positionable power distribution unit is installed in a first  
position, coupling a first connector of the multi-positionable power distribution

unit to a system component; and

if the multi-positionable power distribution unit is installed in a second position, coupling a second connector of the multi-positionable power distribution unit to a system component.

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28. The method of claim 27, further comprising coupling the external power source to said external connector.

29. The method of claim 27, wherein the system component is a  
10 midplane.

30. The method of claim 27, wherein the system component is a power supply.